and mechanical interconnection between said semiconductor die and said external structure; and

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contacts;

an insulating island configured to prevent migration of silver from said silver epoxy bond to said semiconductor die through said first conductive contact.

9. (Amended) A semiconductor flip-chip, comprising: a semiconductor die having a plurality of conductive

a plurality of epoxy bonds having a metallic component, said epoxy bonds configured to provide interconnection between said semiconductor die and an external structure, said plurality of epoxy bonds selectively applied to said plurality of conductive contacts on said semiconductor die and corresponding conductive contacts on the external structure; and

an insulating island corresponding to each of the plurality of epoxy bonds, each insulating island coupled to one of said plurality of conductive contacts, each insulating island configured to prevent migration of said metallic substance from one of said plurality of epoxy bonds to said semiconductor die through said plurality of conductive contacts.

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13. (Amended) The flip-chip of claim 12, wherein said array of insulating islands prevents degradation of low reversebias leakage currents in said array of photodiode pixels.--